

**IN THE UNITED STATES DISTRICT COURT  
FOR THE DISTRICT OF NEW MEXICO**

MIDDLE RIO GRANDE CONSERVANCY  
DISTRICT,

Plaintiff,

v.

No. CIV 99-870, 99-872 and  
99-1445M/RLP (Consolidated)

BRUCE BABBITT, et al.,

Federal Defendants.

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STATE OF NEW MEXICO, *ex rel*  
the STATE ENGINEER, NEW MEXICO  
INTERSTATE STREAM COMMISSION,  
and the NEW MEXICO ATTORNEY  
GENERAL,

Plaintiffs,

v.

BRUCE BABBITT, et al.,

Federal Defendants.

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FOREST GUARDIANS, et al.,

Plaintiffs,

v.

BRUCE BABBITT, et. al.,

Federal Defendants.

MEMORANDUM OPINION AND ORDER

Plaintiffs in each of these consolidated cases challenge a final rule of the Secretary of the Interior which designates critical habitat for the Rio Grande silvery minnow, a small and rapidly disappearing fish declared an endangered species in 1994. Plaintiffs complain pursuant to the National Environmental Policy Act, the Endangered Species Act, the Administrative Procedures Act and the Fifth Amendment to the United States Constitution that the rule designating the silvery minnow's critical habitat is invalid for failure to prepare an Environmental Impact Statement, is arbitrary and capricious and is otherwise not in accordance with the law. All plead to have it set aside.

The case comes up at this time for a plenary review of the administrative record and a determination on the merits. I find and conclude in favor of the Plaintiffs that the record fails to include what is required by law and provides an insufficient basis to support the rationality of the Secretary's determinations or the final rule.

Nature of the Case

In 1999, after decision of the Tenth Circuit Court of Appeals in Forest Guardians v. Babbitt, 174 F.3d 1178 (10th Cir.1999), and a remand to the district court, the Secretary of the Interior was ordered pursuant to the Endangered Species Act to designate a critical habitat for the Rio Grande silvery minnow within 30 days, afterward extended another 90 days. Forest Guardians v. Babbitt, No. CIV 97-0453 (D.N.M). While the Secretary listed the Rio Grande silvery minnow as endangered in 1994, the Department of the Interior failed at that time to issue an accompanying rule designating the species' critical habitat. 59 Fed. Reg. 36988. The Secretary did not publish a final rule designating the silvery minnow's critical habitat until July 1999, after the

Tenth Circuit ruled against the Secretary and remanded the case to the district court. 64 Fed. Reg. 36274. In compliance with the district court's order, the United States Fish and Wildlife Service completed the administrative record and published the decision now at issue.

The present cases challenge the reasonableness and efficacy of the final rule designating critical habitat, the adequacy of the administrative record and the failure to prepare an Environmental Impact Statement prior to a final decision. Plaintiffs invoke the Endangered Species Act (ESA), 16 U.S.C. sec. 1531 *et seq.*, the National Environmental Policy Act (NEPA), 42 U.S.C. sec. 4321 *et seq.*, and the Administrative Procedures Act (APA), 5 U.S.C. sec. 502 *et seq.*; and jurisdiction to review the final administrative decision is not contested.

#### The Multiple Plaintiffs

Bringing this action on its own behalf and on behalf of its constituency, the Middle Rio Grande Conservancy District (MRGCD) claims the final rule at issue will cause a substantial curtailment of irrigated agriculture in the Middle Rio Grande Valley and will result in vast, completely negative ecological, economic, aesthetic, cultural and social changes. MRGCD is a political subdivision of the State of New Mexico with the powers of a municipal corporation. It includes 128,787 acres of irrigable land in the Middle Rio Grande Valley, including lands of six Indian Pueblos (Cochiti, Santo Domingo, San Felipe, Santa Ana, Sandia and Isleta), and it holds the consolidated rights of 70 community acequias (historic ditch systems for the apportioning and distribution of water) which remain senior to all other water users in the area, including municipalities. MRGCD water rights support substantial pasture and alfalfa, and green chili and vegetable, all crops valued by MRGCD at \$28,000,000 annually. In addition to distributing water, MRGCD maintains the distribution system, provides flood protection, manages environmental

measures and ensures recreational amenities within the conservancy district.

By its First Amended Complaint MRGCD contends that the Environmental Assessment prepared in anticipation of designating critical habitat for the silvery minnow ignores critically important data, neglects consideration of alternatives and concludes in error that no Environmental Impact Statement (EIS) is required. MRGCD also claims that Defendants have failed to consider the impact of the final rule on non-federal entities and on all federal agencies assigned responsibilities within the Middle Rio Grande Valley. Fearing that water historically used for agriculture will be diverted to provide in-stream flows for the Rio Grande silvery minnow and therefore result in drying up extensive acreage used for farming, MRGCD contends the designation of critical habitat is too broad, is not tailored to the needs of the silvery minnow and fails to account for or balance the interest of other water users.

Additionally, MRGCD alleges that the rule designating critical habitat violates the Fifth Amendment to the United States Constitution. It claims MRGCD or its constituents could be subject to the ESA's civil and criminal penalties for adversely modifying critical habitat without fair warning of prohibited conduct. MRGCD also complains it has been denied due process by FWS's predeterminations which rendered public comment meaningless and denied the right to be heard.

The State of New Mexico *ex rel* the Attorney General, the State Engineer and the Interstate Stream Commission alleges in its First Amended Complaint that because the final rule at issue "involves the mainstem of the Rio Grande or the active river channel including the water column," it represents "an actual or *de facto* acquisition of an interest in water." Accordingly, the State maintains that designation of the entire 163-mile section of the Middle Rio Grande as critical

habitat for the silvery minnow creates an irreversible and irretrievable commitment of the State's water resources and adversely impacts "the ability of municipalities to provide and maintain an adequate domestic water supply," as well as the ability of the State to manage flood control and to comply with its obligations pursuant to the Rio Grande Compact.

The State additionally complains of the absence of an EIS. It challenges specific facts and analyses that result in Defendant's determination of no significant impact (FONSI), a result which, if correct, excuses the failure to prepare an EIS. The State contends the Economic Assessment published in lieu of an EIS reaches an FONSI only by ignoring the likelihood of specific economic impacts and neglecting fundamental factors related to the nature of the Rio Grande as an active river channel. In its First Amended Complaint, the State points to a wide variety of what it terms essential considerations which it sees as omitted, slighted or viewed in error by Defendants' Environmental Assessment and Draft Economic Analysis.

The State also claims that in designating critical habitat for the Rio Grande silvery minnow, Defendants failed to make determinations absolutely required by the ESA. Specifically, the State argues that in designating the entirety of the silvery minnow's present habitat, FWS failed (a) to determine what is essential for conservation of the species, (b) to define what specific biological and physical features are necessary to its recovery or (c) to indicate where in each reach of the Middle Rio Grande the required features exist. The State further alleges that FWS neglected reasonable alternatives directed toward designating portions of the middle river, rather than its entirety, and repeats MRGCD allegations pursuant to the Fifth Amendment.

Finally, on behalf of the Interstate Stream Commission (ISC), the State challenges the final rule's directive promulgating a continuous flow in the Rio Grande, purportedly essential to

support the silvery minnow. The ISC fears the continuous flow requirement could interfere with the State's contractual obligations to apportion Rio Grande water pursuant to an interstate compact with Colorado and Texas. The ISC is a state agency with responsibility for conserving and protecting New Mexico water, water supplies and stream systems. 72-14-3 NMSA 1978. It bears primary responsibility for implementation of interstate compacts authorized by the United States Constitution. By reason of Congressional assent to the compacts, these stand as federal law which cannot be altered solely by those states which are parties. Texas v. New Mexico, 462 U.S. 554, 564-465 (1982). The State of New Mexico, on behalf of the ISC, alleges that the final rule was implemented without any analysis of economic or other impacts likely to occur inter-state in the event contractually committed water from the San Juan River is diverted into the Rio Grande to maintain the required flow.

Plaintiffs in the third case, Forest Guardians, Defenders of Wildlife and Southwest Environmental Center are non-profit organizations which traditionally participate in efforts to protect and preserve flora and fauna in their native habitats. These Plaintiffs dedicate resources to the continued survival of threatened species, including the Rio Grande silvery minnow, and recovery of ecosystems, including the Rio Grande. All three Plaintiffs allege their members participate in the biological, recreational, educational, scientific, moral, spiritual, health and aesthetic opportunities in the silvery minnow's historic and existing habitat and enjoy viewing and studying the Rio Grande silvery minnow.

These Plaintiffs complain that the rule designating the silvery minnow's critical habitat violates the ESA for failure to include more than the mainstem of the Rio Grande and its associated channel morphology as critical habitat. They allege in their Complaint for Declaratory

and Injunctive Relief, first, that Rio Grande floodplain lands not designated critical habitat contain features essential to the conservation of the silvery minnow, and secondly, that Defendants' failure to address the silvery minnow's recovery needs constitutes neglect of a non-discretionary duty. Plaintiffs thus contend the final rule is a legally insufficient designation of critical habitat in need of revision and seek to have it invalidated as arbitrary and capricious.

Plaintiff-in-Intervention, the City of Socorro, alleges the rule at issue threatens its municipal water supply and its ability to manage flood protection and provide essential services to its constituents. The same as other Plaintiffs, Socorro complains the rule necessitated an EIS, is too broad, is not tailored to the species' needs and fails to balance the interests of other water users in the Middle Rio Grande Valley. The same as other Plaintiffs, Socorro contends that the final rule is inconsistent with ESA requirements because it is "generic and global," failing to identify areas within the 163-mile designation actually suitable for the Rio Grande silvery minnow and essential to its conservation.

The City of Socorro, as do the other Plaintiffs, requests a declaratory judgment that the final rule at issue is arbitrary and capricious and violates NEPA, the ESA and the APA and a permanent injunction both enjoining action based on the designation of critical habitat and directing the Secretary of the Interior to revise it in accordance with applicable law.

### Background

Preservation of the Rio Grande silvery minnow follows a protracted path of controversy and litigation. See: Forest Guardians v. Babbitt, *supra*. The species (*Hybognathus amarus*)

is a stout silver fish with emerald reflections reaching lengths of up to 3 ½ inches. Historically, it was one of the most abundant and widespread fishes in the Rio Grande basin. . . .

Over the past 30 years, however, due in large part to dam construction and dewatering of a large percentage of its habitat, the silvery minnow's presence has been reduced to 5% of its historic range. . . . The fish can now be found only along a 170-mile stretch of the middle Rio Grande, extending from the Cochiti Dam, in Sandoval County, New Mexico to the headwaters of the Elephant Butte Reservoir in Socorro County, New Mexico. Id. at 1181.

Long in jeopardy, the United States Fish and Wildlife Service officially regarded the Rio Grande silvery minnow as endangered over seven years ago. Pursuant to the ESA, the Fish and Wildlife Service first issued a proposed rule in 1993, then in 1994 followed it with a final rule listing the species as endangered. Id.; 64 Fed. Reg. 36277. Although the ESA requires this listing be accompanied by a concurrent designation of the species' "critical habitat," 16 U.S.C. sec. 1533(3)(A), a rule designating critical habitat was not published until court-ordered in 1999. 64 Fed. Reg. 36274; 36277.

The final rule designating critical habitat followed a public hearing in April 1999, and notice published in May initiating a 30-day public comment period. Comments were received on the proposed designation of critical habitat and draft Economic Analysis. 64 Fed. Reg. 36276-36277; 36281. In June 1999, the Fish and Wildlife Service determined by an Environmental Assessment that no significant impact was attributable to the proposed designation and an Environmental Impact Statement was not required. The final rule was published in July 1999. 64 Fed. Reg. 36272-37278.

The critical habitat eventually designated consists of a 163-mile stretch of the mainstem of the Rio Grande. 64 Fed. Reg. 36275. This designation, which includes virtually the entire present habitat of the silvery minnow, extends downstream from Cochiti Dam (about 25 miles southwest



of Santa Fe) to San Marcial, New Mexico, near the headwaters of Elephant Butte Reservoir. *Id.* at 36274. “The designation involves the mainstem of the Rio Grande or the active river channel including the water column and its associated channel morphology.” *Id.* at 36275. The entire 163 miles of the middle river was designated “critical,” according to the Fish and Wildlife Service, because it contains or holds the potential to contain the “primary constituent elements” necessary for the minnow’s survival. These are said to be: (i) “Stream morphology that supplies sufficient flowing water to provide food and cover needed to sustain all life stages of the species,” (ii) “Water of sufficient quality to prevent water stagnation (elevated temperatures, decreased oxygen, carbon dioxide build-up, etc.), and (iii) “Water of sufficient quality to prevent formation of isolated pools that restrict fish movement, foster increased predation by birds and aquatic predators, and congregate pathogens.” 64 Fed. Reg. at 36279; 36288.

#### Defendants’ Position

Defendants are the Secretary of the Interior, the United States Fish and Wildlife Service, Jamie Rappaport Clark, Director of the United States Fish and Wildlife Service, and Nancy Kaufman, Southwest Regional Director of the Fish and Wildlife Service. The Fish and Wildlife Service (FWS) is an agency of the Department of the Interior primarily responsible for the final rule, administrative record, Draft Economic Analysis, Environmental Assessment and Finding of No Significant Impact (FONSI) that are at issue in this case. Defendants rely on their interpretation of the ESA and factual findings specific to designation of critical habitat for the Rio Grande silvery minnow and urge affirmance of the final rule.

Defendants’ case rests, first of all, on a legal premise. In designating critical habitat Defendants claim the ESA at Section 4(b) requires them “to evaluate the economic impacts of the

critical habitat designation only to the extent those impacts are *in addition to* any impacts attributable to the listing of the species itself.” 64 Fed. Reg. 36277-36278. According to this “incremental approach,” impacts ascribed to declaring the species endangered establish a “baseline.” Defendants then consider only those economic and other impacts attributed solely to the designation of critical habitat and disregard impacts traceable to the initial listing. “[I]t is fully appropriate,” Defendants argue, “to look only at the impacts of a proposed action on top of the existing baseline. Where the effects of existing actions will be felt regardless of the proposed action, those effects cannot, of course, be attributed to the proposed action.” Federal Defendants’ Brief in Response Plaintiffs’ Joint Opening Brief at p.17. Defendants claim this incremental approach to an economic analysis is consistent both with the letter of the ESA, which precludes consideration of costs attributable to the listing decision itself, and its intent, which gives the benefit of the doubt to the species. Id.

Defendants’ interpretation of Section 4(b), 16 U.S.C. sec.1533(b)(2), explaining the incremental approach is part of the published final rule at issue.

Congress treated listing a species and designating critical habitat differently with regard to economic impact. On its face, Section 4(b)(2) of the ESA makes clear that consideration of economic impacts is to be limited to those impacts attributable to “specifying any particular area as critical habitat.” 16 U.S.C. sec. 1533(b)(2). In contrast, Section 4(b)(1)(A) of the ESA requires the Secretary to make decision whether to list a species “solely on the basis of the best scientific and commercial data available.” 16 U.S.C. sec. 1533(b)(1)(A). . . In other words, the Secretary is restricted to considering only biological factors when making a listing determination, and cannot be influenced by economic impacts. Id.

Thus, to come full circle, where the effects of listing a species as endangered will occur regardless of the designation of critical habitat, these effects cannot be attributed to the

designation, and if not attributed to the designation, the designation need not (and must not) be modified to ameliorate economic impact.

Defendants' case depends, secondly, then, on the factual findings and the conclusion of the Fish and Wildlife Service that designation of critical habitat for the Rio Grande silvery minnow creates no economic impact beyond what is attributed to listing the species as endangered. *Id.* at 36276-36282. This conclusion, Defendants maintain, is neither extraordinary nor unexpected: "Where habitat destruction is a major cause of endangerment for a species, there is likely to be substantial overlap between a 'jeopardy' analysis required for listed species and an 'adverse modification' analysis for designated critical habitat." Federal Defendants' Brief, *supra* at p. 22; 64 Fed. Reg. at 36278.

Therefore, Defendants argue the adverse impacts enumerated by Plaintiffs in these consolidated cases are immaterial. All impacts complained of, Defendants insist, accompany the listing of endangered and exist regardless of the designation of critical habitat.

Applying the incremental approach, the Service concluded that the critical habitat designation for the silvery minnow would have no economic effects in addition to those resulting from listing. . . . This conclusion resulted from the Service's determination that, because the silvery minnow is so severely endangered, and its endangerment is so heavily due to habitat loss, any adverse modification of the silvery minnow's critical habitat is by definition likely to jeopardize the continued existence of the species (which is prohibited by the listing of the species). Thus, the Service found, with respect to the silvery minnow, that the "jeopardy" and "adverse modification" standards are co-extensive and, consequently, that the designation of silvery minnow critical habitat has no economic effects beyond those caused by the silvery minnow's listing. 64 Fed. Reg. at 36277. This determination is a scientifically-based factual determination due substantial deference by a reviewing court. *Id.* at 21-22.

Defendants support their position, both as to statutory interpretation and application to the case at hand, by stating that the incremental approach has been the position of the Fish and Wildlife Service for more than a decade, is dictated by common sense, arises from the plain language of the statute, and is entitled to deference. Defendants also cite legislative history. The excerpt of the legislative record Defendants provide, however, speaks only to the undisputed point that economic considerations are not a part of determining whether a species should be listed as endangered.

The addition of the word “solely” is intended to remove from the process of the listing or delisting any factor not related to the biological status of the species. The committee strongly believes that economic considerations have no relevance to determinations regarding the status of species. . . . Applying economic criteria to . . . any phase of the species listing process is applying economics to the determinations made under Section 4 of the Act and is specifically rejected by the inclusion of the word ‘solely.’” H.R.Rep.No. 567, 97th Cong., 2d Sess. 20.

In terms of legal precedent or judicial endorsement, Defendants cite only a recent district court case: New Mexico Cattlegrowers Assn. v. United States Fish and Wildlife, 81 F. Supp.2d 1141 (D.N.M.1999) (appeal pending No. 00-2050). This case reviewed a final rule designating critical habitat for the Southwestern Willow Flycatcher. The district court accepted the baseline approach, the Economic Analysis that resulted in no Environmental Impact Statement and the factual conclusions which “found that the critical habitat designation would have no incremental effect beyond that caused by listing.” Id. at 1148.

There are some facts common to the Cattlegrowers case and the present one. The Southwestern Willow Flycatcher is “a migratory songbird which nests and breeds during spring and summer in dense cottonwood-willow riparian habitat.” Southwest Center for Biological Diversi-

ty v. United States Bureau of Reclamation, 143 F.3d 515, 516 (9th Cir.1998). The flycatcher is primarily threatened by loss of its habitat, particularly by the mass destruction of willow and cottonwood trees necessary to nesting and the protection of young. Id. FWS designated a critical habitat which involved a substantial amount of river miles along the Tularosa and San Francisco Rivers in Arizona and New Mexico. It designated nearly all of the riparian system in order to preserve “current and potential nesting” areas “crucial to the survival and recovery of the species,” and it assessed economic and other impact by adopting a “baseline” which attributed all impacts to the listing, rather than to the designation of critical habitat. FWS concluded, in addition, that the designation required no Environmental Impact Statement because it did not constitute a major federal action that would significantly affect the quality of the human environment. New Mexico Cattlegrowers’ Assn. v. United States Fish and Wildlife, supra at 1147-1148; footnote 3.

This single judicial decision, however, does not dispose of the issues in the present case as readily as Defendants suggest because critical differences exist between the Cattlegrowers case and the one at hand. For one, there is no indication in the Cattlegrowers case that the rivers impacted by ESA protections were consistently over-appropriated, frequently below optimum water levels and at times clearly without a flow of water sufficient to support the existence of the species due protection. For another, the protections afforded the flycatcher by the designation of critical habitat were generally viewed as efficacious, adequate as a whole to provide for both short-term and long-term conservation of the species.

The Cattlegrowers case is notably absent those facts most acute to the present one. Where Plaintiffs in the Cattlegrowers case asserted adverse impacts on aesthetic enjoyment, reduced

recreational opportunities and impaired spiritual well-being, Id. at 1154, Plaintiffs in the present case fear an immediate threat to economic development and irrigated farmland. Where the plaintiffs in the Cattlegrowers case complained that extensive fencing blocked access to large segments of river and grazing areas, forcing the use of agricultural water rights to sustain livestock, Id. at 1153, Plaintiffs in the present case fear a unilateral modification of water rights accompanied by the complete withdrawal of water essential for residential, agricultural and commercial uses and a total cessation of local projects supporting water users throughout the Middle Rio Grande Valley. The present case also presents numerous questions, such as whether the silvery minnow's most essential needs have been identified and whether river management is capable by itself of saving the species from extinction, that were not issues in the Cattlegrowers case.

Further, Defendants neglect cases which reject the proposition that designation of critical habitat provides neither impact nor benefit beyond what is provided by a listing of endangered alone. See, e.g.: Catron County Board of Commissioners v. United States Fish and Wildlife Service, 75 F.3d 1429 (10th Cir. 1996); Natural Resources Defense Council v. United States Department of the Interior, 113 F.3d 1121 (9th Cir.1997); Conservation Council for Hawaii v. Babbitt, 2 F. Supp.2d 1280 (D.C. D. Ha.1998); Northern Spotted Owl v. Lujan, 758 F. Supp. 621 (W.D.Wash.1991). "Merely because the Secretary says it does not make it so," notes the Tenth Circuit in the Catron County case. Supra at 1436. Looking at the record in 1996, the Tenth Circuit expected designation of critical habitat for the Rio Grande silvery minnow to create impacts both immediate and disastrous. Id.

Plaintiffs and amici curiae also cite legislative history which opposes Defendants' premise.

Both Plaintiffs and amici contend that Defendants' interpretation of the ESA opposes the intent of Congress when it amended the Act to require consideration of economic and other impacts, and both refer to Senate sponsors of the amendment who stated a desire for "balancing and flexibility" so that the ESA "accommodates people and their needs." 124 Cong. Rec. S19286 (June 28, 1978). "Virtually any public works can be stopped under the act," states one amicus, "unless some balancing and flexibility is blended into the operation" of the ESA and Defendants made to consider impact when designating critical habitat. At least according to the statement of one Senator sponsoring the amendment, "the designation of critical habitat is more important than the designation of an endangered species itself. In many cases, it will not be until habitat is declared to be critical to the continued existence of an endangered species that it will have impacts in the real world." 124 Cong. Rec. S21575 (July 19, 1978, statement of Sen. Jake Garn).

Defendants nevertheless stand by their interpretation of the what the law requires. They repeatedly insist that at the time a designation of critical habitat occurs, effects are correctly assessed only by an "incremental economic impacts approach" that takes into account the baseline established by the initial declaration of endangered and the statutory protections afforded at that point. Similarly, Defendants maintain that in this particular instance "there will be no appreciable impacts which will result from the critical habit designation that would not have occurred but for the designation." Federal Defendants' Brief, supra at 17.

Even though Defendants' position on the law is crucial to the approach taken by FWS both in establishing the administrative record now up for review and in making the determinations under attack, I need not decide whether Defendants correctly interpret the Endangered Species Act or whether the incremental approach is within the Secretary's discretion. Whether, on

the one hand, utilization of a baseline attributing all impact to a listing of endangered is a concept compatible with or dictated by the language and intent of the ESA, or whether, on the other hand, some impacts inevitably must be credited to designation of critical habitat, the administrative record in this case is so overwhelmingly insufficient that the final rule fails and must be set aside regardless of how Defendants read the ESA. Wholly apart from the approach taken, the record fails to establish either an in-depth analysis of facts and circumstances or a sound rational basis for the choices made. Therefore, without regard for whether or not Defendants' position on the ESA is well-founded, the administrative record leaves the final rule unsupportable.

### The Endangered Species Act

The Endangered Species Act was passed in 1973 to preserve ecosystems upon which threatened and endangered species depend and "to halt and reverse the trend toward species extinction." Tennessee Valley Authority v. Hill, 437 U.S. 153,184 (1978); 16 U.S.C. sec 1531(b). The Act's "core purpose" is to prevent the extinction of species by preserving and protecting the habitat upon which they depend from the intrusive activities of humans. Id.; Forest Guardians v. Babbitt, supra at 1437.

#### a. Duties of the Secretary

The ESA obligates the Secretary of the Interior, according to enumerated criteria, to list species determined to be threatened or endangered and in need of protection. 16 U.S.C. sec.1533. A species is "endangered" if it is "in danger of extinction throughout all or a significant portion of its range" and "threatened" if it is "likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range. Id. at sec.1532(6); sec. 1532(20). The Secretary must determine which species are threatened or endangered "solely on the basis of the



best scientific and commercial data available to him after conducting a review of the status of the species and after taking into account those efforts, if any, being made by any State or foreign nation, or any political subdivision of a State or foreign nation, to protect such species . . . .” Id. at sec.1533(b)(1)(A).

Additionally, the Secretary is to “designate any habitat of such species which is then considered to be critical habitat . . . .” Id. at sec.1533(a)(3)(A). Critical habitat is defined as

- (i) the specific area within the geographic area occupied by the species, at the time it is listed. . . on which are found those physical and biological features (I) essential to the conservation of the species and (II) which may require special management considerations or protection; and
- (ii) specific areas outside the geographic area occupied by the species at the time it is listed . . . upon a determination by the Secretary that such areas are essential for the conservation of the species.” Id. at 1532(5)(A).

The designation of critical habitat must be determined “on the basis of the best scientific data available and after taking into consideration the economic impact, and any other relevant impact, of specifying any particular area as critical habitat.” 16 U.S.C. 1533(b)(2). It must be limited geographically to what is essential to the conservation of the threatened or endangered species and may require special management or protection. 16 U.S.C. sec. 1532(5)(A); Northern Spotted Owl v. Lujan, supra at 623. “Thus, even though more extensive habitat may be essential to maintain the species over the long term, critical habitat only includes the minimum amount of habitat needed to avoid short-term jeopardy or habitat in need of immediate intervention. Id. A species long-term protection is properly addressed by a “recovery plan” developed for the “conservation and survival” of the species listed as endangered. 16 U.S.C. sec. 1533(f)(1).

The ESA gives designation of critical habitat the same priority as the listing. It requires that critical habitat, specified to the maximum extent prudent and determinable, “shall” be made concurrently with listing the species as endangered or threatened. Id. at sec.1533(3)(A); 50 C.F.R. sec 424.12(a); Forest Guardians v. Babbitt, supra. The statute compels the designation despite other methods of protecting the species the Secretary might consider more beneficial. Id.; Natural Resources Defense Council v. United States Department of the Interior, supra at 1127.

Formal designation of critical habitat is a key protection. The statute clearly intends to do more than save endangered species and threatened species from jeopardy; it is intended to bring endangered and threatened species back from the brink of extinction to a point where statutory protections are no longer necessary. Tennessee Valley Auth. v. Hill, supra; Forest Guardians v. Babbitt, supra at 1437. The designation of critical habitat therefore serves as the principle means for conserving an endangered species, by protecting not simply the species, but also the ecosystem upon which the species depends. Id.; Forest Guardians v. Babbitt, supra.

Both the ESA and agency regulations speak to how critical habitat is to be evaluated. Critical habitats are to be designated only on land that is essential to a species’ conservation. 16 U.S.C. sec. 1532(5)(A); Conservation Council for Hawaii v. Babbitt, supra at 1286. Prior to designation, there must be a determination of the constituent elements of air, land and water areas essential to the species. These constituent elements are defined as including physical structures and topography, biota, climate human activity, and the quality and chemical content of the land, water, and air, with a focus on the physical and biological needs of the species. 50 C.F.R. sec. 424.12. “To designate critical habitat, the Secretary must use the best scientific data available to identify a geographic area that satisfies the statutory definition of critical habitat, consider the

‘economic impact, and any other relevant impact,’ of designating the habitat, and weigh the benefits of exclusions against those of inclusion of particular areas within the designated habitat.”

Catron County Board of Commissioners v. United States Fish and Wildlife Service, supra at 1434-1435.

The Secretary may exclude any area from critical habitat if he determines that the benefits of such exclusion outweigh the benefits of specifying such area as part of the critical habitat, unless he determines, based on the best scientific and commercial data available, that the failure to designate such area as critical habitat will result in the extinction of the species concerned. 16 U.S.C. sec.1533 (b)(2).

Finally, the Secretary is directed to develop and implement “recovery plans” “for the conservation and survival of endangered species and threatened species listed . . . unless he finds that such a plan will not promote the conservation of the species.” Id. at sec.1533(f)(1). “A recovery plan presents a set of recommendations for recovery of the species than can involve federal, state, and local agencies as well as the private sector. Federal agencies use the recommendations as a guide for refining their management plans, procedures, and strategies. . . .” Draft Economic Analysis at p. 6. Priority in recovery planning is to be given to those species “that are most likely to benefit from such plans, particularly those species are, or may be, in conflict with construction or other development projects or other forms of economic activity. . . .” Id. at sec.1533(f)(1)(A).

In all of these primary duties, the Secretary “shall cooperate to the maximum extent practicable with the States.” Id. at sec. 1535(a). This cooperation is to include “consultation with the States concerned before acquiring any land or water, or interest therein, for the purpose of

conserving any endangered species or threatened species.” *Id.* In this regard, the Secretary “may enter into agreements with any State for the administration and management of any area established for the conservation of endangered species or threatened species.” *Id.* at sec. 1535(b).

b. Protection Against Federal Action

All federal agencies are to work in furtherance of ESA purposes. 16 U.S.C. sec.1536 (a)(1). Once listed as endangered or threatened, a species is protected against federal activity likely to jeopardize its continued existence.” 16 U.S.C. sec.1536(a)(2). “Jeopardize” is defined as “to engage in an action that reasonably would be expected, directly or indirectly, to reduce appreciably the likelihood of both the survival and recovery of a listed species in the wild by reducing the reproduction, numbers, or distribution of that species.” 50 C.F.R. sec. 402.02. This proscription against putting in jeopardy is contained within Section 7 of the ESA and pertains solely to federal activity. Babbitt v. Sweet Home Chapter of Communities for a Great Oregon, 515 U.S. 687, 704 (1995), quoting S. Rep. No. 93-307, p.7 (1973). It reaches non-federal activities which are federally-funded, in whole or in part, or for which a federal agency holds a primary responsibility. Ross v. Federal Highway Administration, 163 F.3d 1046 (10th Cir.1998). The Tenth Circuit defines “major federal action” as “actions by the federal government . . . and nonfederal actions ‘with effects that may be major and which are potentially subject to Federal control and responsibility.’” *Id.* at 1051.

With formal designation of habitat considered to be “critical,” a listed species’ habitat is also protected from federal activity which might result in its destruction or adverse modification. 16 U.S.C. sec.1536(a)(2). “Activities which may destroy or adversely modify critical habitat include those that alter the primary constituent elements . . . to an extent that the value of

designated critical habitat for both the survival and recovery of the silvery minnow is appreciably reduced.” 64 Fed. Reg. 36278. “Destruction or adverse modification” is defined by regulation as “a direct or indirect alteration that appreciably diminishes the value of critical habitat for both the survival and recovery of a listed species. Such alterations include, but are not limited to, alterations adversely modifying any of those physical or biological features that were the basis for determining the habitat to be critical.” 50 C.F.R. sec.402.02. A designation of critical habitat “effectively prohibits all subsequent federal or federally funded or directed actions likely to destroy or disrupt the habitat.” Catron County Board of Commissioners v. United States Fish and Wildlife Service, *supra* at 1434.

Pursuant to Section 7 of the ESA, the listing as endangered or threatened and the designation of critical habitat each trigger a consultation and conferencing requirement, intended to ensure that activities authorized, funded or carried out by federal agencies do not jeopardize the species or harm its critical habitat. *Id.*; 16 U.S.C. sec.1536(a)(3). This consultation and conferencing is mandatory. Natural Resources Defense Council v. United States Department of the Interior, *supra* at 1127. The process demands that any prospective federal action to occur in an area where endangered species or threatened species may be present be preceded by Section 7 compliance, and ultimately, a final approval of the Secretary of the Interior. 16 U.S.C. sec.1536 (a)(3). “Conferencing” is defined as a process which involves informal discussions between a Federal agency and the Service under section 7(a)(4) of the Act regarding the impact of an action on proposed species or proposed critical habitat and recommendations to minimize or avoid the adverse effects.” 50 C.F.R. sec. 402.02. A formal consultation begins with a written request from the federal agency planning an action and ends with the issuance of a biological opinion. 50

C.F.R. sec. 402.14. A biological opinion is defined as an opinion of the Fish and Wildlife Service “as to whether or not the Federal action is likely to jeopardize the continued existence of a listed species or result in the destruction or adverse modification of critical habitat.” *Id.* at 402.02. The biological opinion constitutes a formal assessment of the proposed federal activity.

However, a federal agency proposing an action, having consulted with FWS, is not bound by the findings of the biological opinion or its final conclusion as it pertains to the proposed action. National Wildlife Federation v. Coleman, 529 F.2d 359, 371 (5th Cir.1976), citing 119 Cong. Rec., S. 14536 (July 24, 1973). Once an agency has completed “meaningful consultation with the Secretary . . . the final decision of whether or not to proceed with the action lies with the agency itself. Section 7 does not give the Department of Interior a veto over the actions of other federal agencies, provided that the required consultation has occurred.” *Id.*

Consistent with Defendants’ argument in the present case, FWS takes the position that an endangered species is equally protected by Section 7 requirements with or without a designation of critical habitat; FWS regulations interpreting consultation requirements do not distinguish between determinations of “jeopardy” from inquiry into “destruction or adverse modification of critical habitat.” 50 C.F.R. sec. 402.14.

Some authorities, on the other hand, read Section 7 requirements as providing sound reason for designation of critical habitat, with the listing of endangered by itself insufficient to accomplish the goals of the ESA. See, e.g.: Natural Resources Defense Council v. United States Department of the Interior, *supra*; Conservation Council for Hawaii v. Babbitt, *supra*. In the Conservation Council case, plaintiffs challenged an FWS decision not to designate critical habitat for 245 plant species in Hawaii listed as endangered or threatened. At the time, FWS had listed

“approximately 700 plants nationwide as endangered or threatened . . . and designated a critical habitat for twenty-four.” Id. at 1280-1281. The bases FWS claimed for its nondesignation in Conservation Council parallels reasons given in the present case to support a finding of no impact: “the designation of a critical habitat provides little or no additional benefit beyond the existing precautions the federal government must take because the plant species are listed as endangered or threatened.” Id. at 1281.

The district court in Conservation Council for Hawaii v. Babbitt wholly rejected the FWS position. The court concluded, first, that Section 7 requirements were enhanced with designation of critical habitat. Rather than simply considering “jeopardy” in general terms, “[a]fter a critical habitat is designated, the consultation requirement also includes consideration of whether the federal activity would ‘result in the destruction or adverse modification’ of the critical habitat.” Id. at 1286. Secondly, the decision emphasized “significant substantive and procedural protections” which may result from the designation of critical habitat apart from what a declaration of endangered provides. Id. at 1287. “Although a designation of critical habitat may not provide more specific information regarding the location of a species,” the court stated, “it may provide more information regarding the importance of certain elements of the species’ environment; a critical habitat is designated only on land that is essential to the species’ conservation.” Id. at 1286, footnote 8.

“Procedurally, the designation of a critical habitat educates the public as well as state and local governments, and affords them the opportunity to participate in the designation. . . . Congress envisioned a process in which the public is informed and participates in the designation of a critical habitat; these procedures do not occur when a federal agency consults the FWS under

Section 7.” Id. at 1288. Designation also “may better inform other federal agencies regarding areas in which consultation is required.” Id. at footnote 11.

Substantively, designation establishes a uniform protection plan prior to consultation. In the absence of such designation, the determination of the importance of a species’ environment will be made piecemeal, as individual federal projects arise and agencies consult with the FWS. This may create an inconsistent or short-sighted recovery plan. . . Thus, the designation ensures that the proper attention and focus is provided in determining a recovery plan. Id. at 1287-1288.

FWS itself provides some evidence to buttress a conclusion that a listing of endangered and designation of critical habitat do not provide identical protections. See: Draft Economic Analysis at p.8, Table 1.1 (“Brief Comparison of Listing vs. Designation”). In National Wildlife Federation v. Coleman, supra, FWS used a designation of critical habitat to overcome the Department of Transportation’s proposed highway construction which clearly threatened the habitat of the Mississippi Sandhill Crane, declared an endangered species in 1973. In 1974, the Federal Highway Administration approved a draft EIS for the construction of Interstate 10 through Mississippi to the Mississippi-Alabama state line. Id. at 363. In 1975, the Department of the Interior expressed its opposition to a 5.7 mile segment of the new highway on the ground the EIS inadequately addressed potential adverse effects on the Mississippi Sandhill Crane habitat and no ESA consultation with FWS had occurred. Id. at 366. The State of Mississippi and the Federal Highway Administration nonetheless proceeded with their plans for I-10; and plaintiffs, the National Wildlife Federation, filed suit on May 23, 1975. “The day before the trial . . . June 25, 1975, the Director of the Fish and Wildlife Service issued . . . an emergency determination of ‘critical habitat’. . . .” Id. at 367. On September 3, 1975, FWS published a proposal “to amend 50



C.F.R. Part 17 by adding a new Subpart F thereto for ‘critical habitat’ and a new sec.17.80 thereunder which would designate ‘critical habitat’ for the Mississippi Sandhill Crane.” *Id.* at 368, footnote 10.

It appears from the decision in the Coleman case that FWS was correct in finally designating “critical” habitat; the designation apparently made a substantial difference to the outcome. “It is beyond question from the record,” the Fifth Circuit Court of Appeals stated, “that the excavation of borrow pits within the area determined by the Secretary of Interior to be ‘critical habitat’ for the crane will destroy and modify their habitat, in violation of sec. 7.” *Id.* at 374. When defendant, Department of Transportation, argued that a refuge for the crane to be acquired by FWS and the recognition of certain areas for conservation by the Gulf Regional Planning Commission saved the crane from jeopardy and sufficiently lessened “the impact of the highway on the crane,” the Fifth Circuit answered that “even if these actions were taken, the Department of Interior has determined that approximately 100,000 acres of habitat in Jackson County is critical within the meaning of sec. 7. . . .” *Id.* at 373. The primary reason, then, the Fifth Circuit concluded that the proposed action stood in violation of the ESA was not that the federal action jeopardized the crane, but that the Secretary had delineated “an area of 100,000 acres in Jackson County as ‘critical habitat’ under sec. 7 . . . and the proposed segment of I-10 traverses an extensive portion of this 100,000 acres.” *Id.* at 374.

#### c. Protection Against Private Action

Designations of critical habitat may include private land. Babbitt v. Sweet Home Chapter of Communities for a Great Oregon, *supra* at 688; Natural Resources Defense Council v. United States Department of Interior, *supra* at 1286; Conservation Council for Hawaii v. Babbitt, *supra* at

1285; 65 Fed. Reg. 24340 (Department of the Interior Final Rule to be codified at 50 C.F.R. Part 17). The ESA neither requires nor suggests that private land containing the constituent elements necessary to a protected species' survival be excluded from designation. Areas containing primary constituent elements may be excluded only if the Secretary finds that economic or other impacts outweigh the benefit of designation. 16 U.S.C. sec. 1533(b)(2). "In fact, there are at least two benefits to designation of critical habitats on private property. First, even if no federal activity currently occurs on the land, there may be such activity in the future, and there is no assurance that the FWS would designate a critical habitat at that time or that such a designation would be timely." Conservation Council for Hawaii v. Babbitt, *supra*.

Second, the designation itself informs the public as well as the state and local governments. . . . Although the determination that a species is endangered or threatened is also publicized, the designation of the critical habitat provides greater information to the public and state and local government by informing not only that the species is endangered or threatened but also what area is essential to the conservation of the species." *Id.* at 1286.

A listed species is also protected from "taking" by individuals and private entities. 16 U.S.C. sec.1538(1)(B). Listed with other proscriptions, "taking" means harassment, harm, pursuit, hunting, shooting, wounding, killing, trapping, capture or collection. *Id.* at sec.1532(19). The ESA's legislative history indicates Congress intended protection against "taking" to be as broad as possible and "to include every conceivable way in which a person can 'take' or attempt to 'take' any fish or wildlife." Babbitt v. Sweet Home Chapter, *supra*, quoting S. Rep. No. 93-307, p.7 (1973). "Taking" and "harm" are also defined by regulation to include "significant habitat modification or degradation where it actually kills or injures wildlife." 50 C.F.R. sec.

17.3; Babbitt v. Sweet Home Chapter, *supra* at 691.

The prohibition on “taking” is referred to as a Section 9 protection. Section 9 protections, unlike the directives in Section 7, apply to “any person.” *Id.* at 703. In addition, “Section 7 imposes a broad, affirmative duty to avoid adverse habitat modifications that Section 9 does not replicate, and Section 7 does not limit its admonition to habitat modification that ‘actually kills or injures wildlife.’” *Id.*

#### The National Environmental Policy Act

Clearly, the Tenth Circuit Court of Appeals views NEPA as furthering the goals of the ESA, without a conflict between the two. Catron County Board of Commissioners v. United States Fish and Wildlife Service, *supra*. “NEPA ensures that a federal agency makes informed, carefully calculated decisions when acting in such a way as to affect the environment and also enables dissemination of relevant information to external audiences potentially affected by the agency’s decision.” *Id.* at 1437. “By contrast, ESA’s core purpose is to prevent the extinction of species by preserving and protecting the habitat upon which they depend from the intrusive activities of humans.” *Id.* “While the protection of species through preservation of habitat may be an environmentally beneficial goal, Secretarial action under ESA is not inevitably beneficial or immune to improvement by compliance with NEPA procedure.” *Id.*

##### a. Requirement of an EIS

NEPA is intended to guarantee that government agencies are informed of and fully consider environmental consequences when undertaking “major Federal actions significantly affecting the quality of the human environment.” 42 U.S.C. sec. 4332. “NEPA’s requirements are not solely designed to inform the Secretary of the environmental consequences of his action.

NEPA documentation notifies the public and relevant government officials of the proposed action and its environmental consequences and informs the public that the acting agency has considered those consequences.” Catron County Board of Commissioners v. United States Fish and Wildlife Service, *supra* at 1437.

Thus, NEPA demands federal agencies work with a focus. They must “‘use all practicable means and measures’ to avoid environmental degradation, preserve historic, cultural and natural resources, and promote ‘the widest range of beneficial uses of the environment without . . . undesirable and unintended consequences.’” Lori H. Patterson, “NEPA’s Stronghold: A Noose for the Endangered Species Act,” 17 *Cumb. L. Rev.* 753, 755 (1996-1997), quoting 42 U.S.C. sec. 4331. Federal officials are expressly required to consult with and obtain the comments of “any Federal agency which has jurisdiction by law or special expertise with respect to any environmental impact involved” and to “study, develop, and describe appropriate alternatives to recommended courses of action . . . .” 42 U.S.C. sec. 4332(E).

The Act’s principal means for accomplishing its goals is requirement of an impact statement. For every major Federal action, the Act requires “a detailed statement” setting out

- (i) the environmental impact of the proposed action,
- (ii) any adverse environmental effect which cannot be avoided should the proposal be implemented,
- (iii) alternatives to the proposed action,
- (iv) the relationship between local short-term uses of man’s environment and the maintenance and enhancement of long-term productivity, and
- (v) any irreversible and irretrievable commitments of resources which would be involved in the proposed action should it be implemented.” *Id.* sec. 4332(C).

“The primary purpose of an environmental impact statement is to serve as an action-

forcing device to insure that the policies and goals defined in the Act are infused into the ongoing programs and actions of the Federal Government.” 40 C.F.R. sec. 1502.1. By the EIS, both the public and relevant government officials are notified of the proposed action and its environment-al consequences and both are told that the acting agency has considered those consequences. Catron County Board of Commissioners v. United States Fish and Wildlife Service, *supra*; Committee to Save the Rio Hondo v. Lucero, 102 F.3d 445, 451 (10th Cir.1996); Weinberger v. Catholic Action of Hawaii, 454 U.S. 139, 143 (1981). In addition, the EIS must discuss reason-able alternatives to the proposed agency action. 42 U.S.C. sec. 4332(2)(C)(iii); 40 C.F.R. sec. 1502.14. An agency need not include an infinite range of alternatives, but is required to cover those which are feasible and briefly explain why other alternatives, not discussed, have been eliminated. City of Carmel-By-The-Sea v. United States Department of Transportation, 123 F.3d 1142, 1155 (9th Cir.1997); 40 C.F.R. sec.1502.14(a)-(c).

The threshold for arriving at a “major federal action” requiring preparation of an EIS is generally low. Davis v. Morton, 469 F.2d 593, 597 (10th Cir. 1972). “Section 102 duties are not inherently flexible. Consider-ations of administrative difficulty, delay or economic cost will not suffice to strip the section of its fundamental importance.” *Id.* at 597, quoting Calvert Cliffs’ Coord. Comm. v. United States Atomic Energy Comm’n, 146 U.S. App. D.C. 33, 449 F.2d 1109, 1115 (1971). Because Federal agencies “must comply with NEPA ‘to the fullest extent possible,’” NEPA and its demand of an EIS are broadly applied. Catron County Board of Commissioners v. United States Fish and Wildlife Service, *supra* at 1433. “[U]nless the obligations of another statute are clearly mutually exclusive with the mandates of NEPA, the specific requirements of NEPA will remain in force.” Davis v. Morton, *supra*. Unlike some of the federal circuit courts,

therefore, in the Tenth Circuit the requirement of an EIS is specifically applied when the Secretary of the Interior designates critical habitat pursuant to the Endangered Species Act. Catron County Board of Commissioners v. United States Fish and Wildlife Service, supra at 1436.

b. Allowance for an Environmental Assessment

Whenever an agency is uncertain whether a EIS is required, the agency may prepare a preliminary Environmental Assessment (EA). 40 C.F.R. sec. 1501.4 and sec.1508.9. An EA is defined as “a concise public document for which a Federal agency is responsible that serves to (1) briefly provide sufficient evidence and analysis for determining whether to prepare an environmental impact statement or a finding of no significant impact.” Id. The EA aids the agency in determining whether a significant effect will result from the proposed action. Id.; Catron County Board of Commissioners v. United States Fish and Wildlife Service, supra. With the preparation of an EA, the agency makes either a finding of no significant impact (FONSI) and does not move on to an EIS, or the agency determines a significant environmental impact will result and prepares an EIS. Id.; 40 C.F.R. sec.1501.4. If the EA results in a FONSI, the EA serves to complete the agency’s obligations pursuant to NEPA. 40 C.F.R. sec. 1508.9(a)(2).

The Administrative Procedures Act

Jurisdiction to review Plaintiffs’ claims rests in the APA. Biodiversity Legal Foundation v. Babbitt, 146 F.3d 1249 (10th Cir. 1998); Committee to Save the Rio Hondo v. Lucero, supra. The function of APA review is to determine “(1) whether the agency acted within the scope of its authority, (2) whether the agency complied with prescribed procedures, and (3) whether the action is otherwise arbitrary, capricious or an abuse of discretion.” Olenhouse v. Commodity Credit Corporation, 42 F.3d 1560, 1574 (10th Cir. 1994); Committee to Preserve Boomer Lake

Park v. Department of Transportation, 4 F.3d 1543, 1549 (10th Cir.1993). A court is to look for a rational connection between the facts found and the choice made and to determine whether there has been “a clear error of judgment.” Citizens to Preserve Overton Park, Inc. v. Volpe, 401 U.S. 402, 416 (1971); Committee to Preserve Boomer Lake Park v. Department of Transportation, *supra*; Ross v. Federal Highway Administration, *supra*.

“The APA provides that ‘the reviewing court shall decide all relevant questions of law, interpret constitutional and statutory provisions, and determine the meaning or applicability of the terms of an agency action. The reviewing court shall . . . compel agency action unlawfully withheld or unreasonably delayed.’” Forest Guardians v. Babbitt, *supra* at 1186, citing 5 U.S.C. sec. 706(1) and Mt. Emmons Mining Co. v. Babbitt, 117 F.3d 1167, 1170 (10th Cir. 1997). “[W]hen a statute uses the word ‘shall,’ Congress has imposed a mandatory duty upon the subject of the command;” and judicial review may not extend agency discretion or authority beyond what a statute provides. Forest Guardians v. Babbitt, *supra*.

#### Standard of Review

Judicial inquiry into administrative decisions is limited to whether the agency “considered the relevant factors and articulated a rational connection between the facts found and the choice made.” Baltimore Gas and Electric Co. v. Natural Resources Defense Council, Inc., 462 U.S. 87, 105 (1983). A court is not permitted to substitute its judgment over that of the administrative decision-maker. Committee to Preserve Boomer Lake Park v. Department of Transportation, *supra* at 43. Administrative decisions must be upheld unless the decision is “arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with the law.” 5 U.S.C. sec. 706(2)(A); Biodiversity Legal Foundation v. Babbitt, *supra* at 1252; State of Utah v. Babbitt, 137 F.3d 1193,

1203 (10th Cir.1998). An agency decision regarding the need for an Environmental Impact Statement is also reviewed under the arbitrary and capricious standard of the APA. Ross v. Federal Highway Administration, supra at 1050.

Without question, the scope of judicial review is narrow. Id.; Motor Vehicle Manufacturers.Assoc. v. State Farm Mutual Auto Ins.Co., 463 U.S. 29, 43 (1983). A court is generally restricted in its determinations to the administrative record in existence at the time the agency made its decision. Citizens to Preserve Overton Park, Inc. v. Volpe, supra; Camp v. Pitts, 411 U.S. 138, 142 (1973). At the same time, review must be “probing,” “thorough,” “careful” and “searching.” Committee to Preserve Boomer Lake Park v. Department of Transportation, supra at 1549-1550. Administrative actions must be set aside where “the agency relied on factors which Congress has not intended for it to consider, entirely failed to consider an important aspect of the problem, offered an explanation for its decision that runs counter to the evidence before the agency, or is so implausible that it could not be ascribed to a difference in view or the product of agency expertise.” Motor Vehicle Manufacturers.Assoc. v. State Farm Mutual Auto Ins.Co., supra; Olenhouse v. Commodity Credit Corporation, supra at 1574. “Moreover, if agency action was ‘unlawfully withheld or unreasonably delayed,’” a court on review must compel the agency “to take appropriate action.” Ross v. Federal Highway Administration, supra at 1051.

#### The Final Rule

Department of the Interior regulations at 50 C.F.R. sec. 424.12 require FWS to identify physical and biological attributes (a) essential to the silvery minnow’s conservation and (b) possibly requiring special management and protection considerations. Accordingly, FWS



determined the “primary constituent elements” essential to conservation of the silvery minnow to be:

1. “Stream morphology that supplies sufficient flowing water to provide food and cover needed to sustain all life stages of the species;”
  2. “Water of sufficient quality to prevent water stagnation (elevated temperatures, decreased oxygen, carbon dioxide buildup, etc.);”
  3. “Water of sufficient quality to prevent formation of isolated pools that restrict fish movement, foster increased predation by birds and aquatic predators, and congregate pathogens;”
- 64 Fed. Reg. 36278-36279. FWS also determined that “at any given time” all parts of the Middle Rio Grande are capable of containing the primary constituent elements and therefore every portion of the 163 miles of the middle river must be “critical” habitat. Id.

FWS provides three principle reasons for designating the entire middle river as critical habitat. First, FWS found all three (or the potential for all three) primary constituent elements throughout the river system. Id. at 36280. Dividing the Rio Grande into “four identified reaches delineated to reflect the management of water and habitat,” the Cochiti, Angostura, Isleta and San Acacia, FWS decided that “contiguity of habitats within and among the different reaches of the Rio Grande and the importance of the linkage between upstream and downstream activities and habitats does not allow for the removal from designation of one river section from its adjacent upstream and downstream non-Indian counterparts without potentially decreasing the value of all sections.” Id. Secondly, FWS found “the unique relationship existing between the pueblos and the non-Indian Middle Rio Grande Conservancy District,” together with “the interdependence of Tribal and non-Tribal activities throughout the stretch of critical habitat lying within the District”

did not facilitate separating the river by sections. Finally, because designat-ing all of the 163 miles of the Middle Rio Grande encompasses “the last remnant of habitat still occupied by the silvery minnow (approximately 5 percent of the species’ historical habitat),” FWS considers the entire middle river “the least amount available with which to achieve the survival and recovery of the species.” Id.

FWS did not at any time consider designating less than the entire 163 miles of the middle Rio Grande. It considered only designation of the whole and a “No Action” alternative, the latter meaning no designation at all. EA at 30. These two extremes, and no other possibilities, were examined in the context of a Tenth Circuit ruling in 1999 that “Shall means shall,” telling the Secretary of the Interior that the ESA “imposed a clear duty” to designate critical habitat. Forest Guardians v. Babbitt, supra at 1186. Examination of a “No Action” alternative must therefore be viewed skeptically, leaving doubt whether any alternative to designating the silvery minnow’s entire habitat was truly considered. Regardless, FWS decided (a) that designation of the entire middle river was the appropriate action, (b) that such designation imposed no restrictions not already in place by reason of listing the minnow as endangered, and (c) that because all impact was attributable to the listing, designation of critical habitat resulted in neither economic effect nor cumulative impact. 64 Fed. Reg. 36278; EA at 32.

Having reviewed the final rule in the context of the administrative record, I find and conclude for each of the following reasons that it must be set aside.

(1) The determinations and assumptions expressed in the final rule are not supported on factual grounds or by adequate analysis, leaving the choices made arbitrary and capricious;

(2) Designation of the entire 163 miles of the middle Rio Grande as critical habitat is not

accompanied by a scrutiny of alternatives which might limit the designation to less than the entirety of the silvery minnow's present habitat, and therefore, the designation is contrary to duties imposed by the Endangered Species Act and fails to provide the full consideration of alternatives required by the National Environmental Protection Act;

(3) The administrative record does not support a conclusion that no impact is attributable to the designation of critical habitat because it does not adequately identify or justify the baseline used in attributing all impact to the listing of the species as endangered;

(4) The final rule fails to define with sufficient specificity what biological and physical features are essential to survival of the silvery minnow and identifies the primary constituent elements of the silvery minnow's habitat in terms too vague and too broad to be meaningful for any purpose intended by the ESA;

(5) The finding of no significant impact contained in the Environmental Assessment does not represent a reasoned judgment, and therefore, the final rule should have been preceded by an Environmental Impact Statement

#### The Administrative Record

##### a. Refusal to Acknowledge Real and Unavoidable Economic Impact

FWS' designation of critical habitat ignores completely the most basic reality of the Rio Grande: it is a fully appropriated river system. Rights to *all* of the river's surface water are legally held for a variety of beneficial uses, those holding water rights utilize them to the full extent permitted, and no water is available to appropriate for other uses. Draft Economic Analysis, pp. 55-57; 107-108. In such a circumstance, an express preclusion of isolated pools in a river notorious for its highly variable flow and natural depletions, together with periodic releases of

water required solely for the purpose of maintaining a constant bank-to-bank flow must inevitably result in staggering complexities and unavoidable economic and other consequences.

FWS avoids this conundrum completely and neglects plain facts. It fails not only to search out and utilize necessary information, but also to provide explanations to indicate how it weighed competing evidence and reached conclusions. Its hugely optimistic sense that unlimited water will be available as needed to maintain a year-round continuous flow in the Rio Grande is only one illustration. The estimate of water likely to be available in the Rio Grande found in the Draft Economic Analysis speaks only to 1996, the end of a decade of above normal runoff and several years of significant thunderstorm activity in the Middle Rio Grande Valley. AR at X.B. 14, p. 9-13. The years immediately preceding 1996 allowed releases of water upstream that provided several months of a reasonably constant high to average flow without diversion of any water allocated for municipal, irrigation and other uses. Id. The situation had changed drastically, however, by the time the draft report was published. Id. The draft's conclusions that "the supply of water should satisfy the Middle Rio Grande's current consumptive uses and obligations more than 80 percent of the time" and "the past record indicates that in each year there is an 80 percent probability that the natural flow of water entering the Middle Rio Grande area will be sufficient to satisfy current usage patterns," Draft Economic Analysis at p. 69, have been dramatically contradicted by the dry years and difficult conditions since 1996. The conclusions of the Draft Economic Analysis have thus proven unreliable and could not be carried over to 1999 with any genuine attempt at a realistic assessment.

FWS avoids, as well, any discourse explaining why its determinations constitute reasonable or suitable solutions to the issues presented. Instead, the conclusions expressed in the final

rule generalize and oversimplify complex human and ecological circumstances without the slightest indicia of concern for the “needless economic dislocation” referred to by the United States Supreme Court in Bennett v. Spear, 520 U.S. 154, 177 (1997). The Draft Economic Analysis can only be read as callous treatment of the people and communities of the Middle Rio Grande Valley when it states:

In sum, the evidence is insufficient to document whether the proposed designation would result in net economic benefits or costs, although there is considerable evidence indicating that it probably would yield net benefits for the nation as a whole. The overall net effect probably is close to zero. This conclusion is consistent with two observations. One is that, for every worker, household, firm, or community that experiences a cost because of the designation, there is a counterpart somewhere that, sooner or later, experiences a benefit that is more or less of the same magnitude. . . The other is that . . . [t]he institutional structure governing the Rio Grande currently fails to recognize the value of instream water flows and resources and creates incentives for water to be allocated to uses that have less value. Insofar as the designation generates pressure to correct this imbalance, it also will increase the likelihood national economic welfare will increase. Draft Economic Analysis at p. 113.

Thus, while the Draft Economic Analysis acknowledges that farming in the Middle Rio Grande Valley is put at serious risk by designating the entire middle river as critical habitat and requiring a continuous flow through its 163 miles, the same report, and apparently FWS, dismiss the probability of a vast shift in New Mexico’s economy, culture, ecology and social life as wholly unremarkable.

Economic forces will push strongly to ensure that the reduction in salvaged water materializes as a curtailment to the lowest-value use of water. The lowest-value use appears to be the irrigation of pasture, where the value probably is zero. . . .

Over time, even this impact will be dispersed and mitigated throughout the entire economy as irrigators and others adjust to the designation. The actual path of the adjustment is impossible to

predict, but . . . it is clear that several economic forces will influence the adjustment process. Draft Economic Analysis at p. 94.

Apparently, “adjustment” and “displacement” are interchangeable terms with little human content.

However, completely ignoring human and economic impact directly counters the intent of the Endangered Species Act and is an unacceptable approach to fulfilling ESA responsibilities.

In the end, FWS simply urges umbrella concepts without an examination of specific or individual facts. It summarizes its determinations without articulating any understanding of what they mean in real and workable terms. As one amicus curiae states, the final rule provides “an astonishing lack of guidance.” Certainly, in a region perpetually too dry and in a river which commonly loses water for a multitude of uncontrollable reasons, there is not a semblance of logic in assuming that an unspecified (and apparently unlimited) amount of water will be available at all times and under any circumstances, and when it is not, it can be taken from fully appropriated and legally protected uses without any consequence, economic or otherwise.

It appears from the final rule that FWS started with a clear idea of where it would end up and went directly to that point with little pause or process in between. The administrative record fails to demonstrate any careful identification or weighing of pertinent facts, any meaningful consideration of the concerns and opinions of state and federal authorities or any regard for the several entities with direct involvement in the issues to be decided. Completely disregarding the role and experience of the Bureau of Reclamation in management of the Rio Grande, for example, the Environmental Assessment deems all of Reclamation’s extensive information and harsh

criticisms as no more than “their own interpretation of the ramifications of avoiding modification of critical habitat.” E.A. at 30. FWS thus dismisses out of hand what Reclamation puts before it, as it appears to do with everything else that counters what it had already decided to do, without any reasoning to explain why its own conclusions are preferred, even as to subject matter which is within another agency’s expertise and not its own. Containing only summary conclusions, the Environmental Assessment states FWS’ interpretation of the ramifications of designating critical habitat: that the identified activities would have no impact which would not also jeopardize the continued existence of the species; and therefore, no impact of legitimate concern. Id. The FWS interpretation, however, does not account for an administrative record replete with opposing facts.

First, without doubt, by the terms of the final rule designation of the silvery minnow’s critical habitat brings with it a requirement that substantial amounts of water remain continuously present in the middle Rio Grande to maintain a constant bank-to-bank flow. Although FWS has attempted to ameliorate what immediately comes to mind in terms of the drastic consequences likely to result from such a requirement in a fully appropriated (or over-appropriated) system, statements directed towards what FWS means by a continuous flow appear to be more cosmetic than definitive. For example, the Environmental Assessment states “the identification of primary constituent elements for the minnow is not intended to create a high-velocity, deep-flowing river. The minnow does not require such habitat characteristics.” E.A. at 29. Considering that nothing is likely to transform the Rio Grande into a “high-velocity, deep-flowing river” and that the Rio Grande silvery minnow exists precisely because the Rio Grande is not a high-velocity, deep-flowing river, the comment can hardly stand as any reassurance whatsoever that FWS intends no

major change.

Secondly, the constant flow requirement, together with the potentially unlimited diversion of water from other beneficial uses, comes with designation of critical habitat. While a constant flow was regularly considered in Section 7 consultations after 1994, a demand for constant flow at the cost of other beneficial uses did not accompany listing the silvery minnow as endangered. See, e.g.: Programmatic Biological Assessment, May 1998, AR at X.B.39; IX.D.49. From 1994 to 1999, FWS imposed no expectation of a continuous flow throughout the whole of the middle river; and before 1999, none of the several entities now burdened with responsibility for maintaining a constant flow in the middle Rio Grande held any imperative to keep water moving in all of the 163 miles, regardless of the cost to other beneficial uses and individual water rights. Id.; X.B.39; Cons. No. 2-22-97-F-300, AR at X.A.14. It was conceivable prior to 1999, as now, that because large portions of the river contain no silvery minnow, activity that might have adverse effect on the ecosystem may not result, at least for the short term, in any “taking” of or any jeopardy to specific minnow. Id. Yet, the administrative record and the final rule recognize no potential scenarios, much less a variety of possibilities, and the rule concludes in stone that no impacts can be attributed exclusively to the designation of critical habitat--and therefore, none are to be considered to limit it.

The record, however, works against this conclusion. In the years after the silvery minnow was listed as endangered, FWS looked more to what would preclude a constant flow than what would be required to provide one. Id. Certainly, maintenance of flow and prevention of long-standing isolated pools was a concern in 1996, but when conditions changed to drought, FWS approved a flow of 65 cubic feet of water per second below San Acacia. Id., p. 13. It found



advantageous, but did not demand flow requirements of 200 cubic feet of water per second or more until after designation of critical habitat in 1999. Id.; IX.D.49. Thus, unlike what followed the listing in 1994, only the designation of critical habitat has imposed an affirmative obligation to keep water flowing irrespective of the weather, the snow-melt runoff, the amount of rainfall or other competing needs; and only since the designation of critical habitat in 1999 has it been necessary to demand multiple releases of water in the middle Rio Grande at the cost of municipal and irrigation use, water management and maintenance projects.

FWS believes it is excused nonetheless from considering economic and other impact. FWS maintains that even if the designation of critical habitat brings new mandates, additional activities or requirements contemplated by or occurring with the designation are calculated not only to maintain the designated critical habitat without adverse modification, but also to save the silvery minnow from jeopardy. Because the latter reflects the consequences of listing the species as endangered, economic consequences are beyond consideration, irrespective of changes that accompany the designation of critical habitat. “Where the effects of existing actions will be felt regardless of the proposed actions,” say Defendants, “those effects cannot, of course, be attributed to the proposed action.” If this reading of the law is correct, it permits FWS and ultimately the Secretary to circumvent an economic analysis altogether.

Of course, this interpretation of the ESA is suspect at the outset because it avoids the plain language of the statute. Even though proscribed at the time of listing a species as threatened or endangered, the ESA mandates that economic and other impacts be considered at the time of designating critical habitat. It appears that neither the statute nor the Supreme Court contemplate a designation of critical habitat wholly absent economic considerations. Bennett v. Spear, supra.

The Supreme Court has found designation of critical habitat a primary means of advancing conservation of a species and has viewed economic considerations an essential ingredient of critical habitat determinations. *Id.* at 176-177. “That economic consequences are an explicit concern of the ESA is evidenced by sec.1536(h), which provides exemption of sec.1536(a)(2)’s no-jeopardy mandate where there are no reasonable and prudent alternatives. . . .” *Id.* at 177.

If Defendants’ reading of the ESA is even arguably correct, then, it cannot entirely foreclose the possibility that designation of critical habitat can create impacts attributed exclusively to the designation and it cannot propose that analysis of economic impact is *never* required in conjunction with designation. If Defendants’ reading of the ESA is defensible, it is defensible on the basis of facts and analysis specifically applied to each case individually.

However, the rule in question speaks solely of the concept and recites an ultimate conclusion in the most general terms without facts and analysis specific to the case at hand. Remarkably, FWS reaches a determination of “no impact” without any definition of the meaning of “continuous flow,” any estimate of how much water will be required or any explanation of the source of this water should it not be made available by the fortuities of the season. Given the region’s history and the river’s morphology, reaching a “no impact” conclusion without identifying how much water could be required and where that water will come from appears to be the essence of arbitrary and capricious.

Without fully considering all potentialities, the conclusion that *even if* the most dire predictions are realized, these come to no more than would have occurred by reason of the silvery minnow’s listing as endangered also constitutes a strong bent toward the capricious. It does not appear from either the final rule or the administrative record that FWS has scrutinized enough

facts or undertaken any sufficiently specific analysis of the multitude of possibilities to any extent that would permit it at this juncture to assign consequences in a manner which allows these consequences to be completely disregarded. In the face of the perplexing and nearly impossible circumstances encountered in this particular designation of critical habitat, FWS has not justified its sweeping assumptions. For expediency's sake it has glossed over highly pertinent evidence and summarily dismissed every fact and every public comment that calls its conclusions into question.

With respect to analysis specific to this case, FWS has made no real attempt to examine or apportion impact, economic or otherwise. At no point did FWS endeavor to quantify impacts specifically credited to the listing in order to distinguish remaining and expected impacts not so readily assigned. At every point FWS looked solely at optimal conditions. Nothing FWS presents indicates a realistic baseline, and without a well-researched and well-reasoned baseline, a determination of "no impact" remains nothing more than an initial concept; and irrespective of how Defendants interpret the ESA or what deference should be afforded Defendants' view, the concept by itself is not enough to secure the final rule in question. Wholly apart from its reading of the ESA, FWS has neither examined all that the statute requires it to consider nor demonstrated a rational basis either for its decision to designate the entirety of the middle Rio Grande as critical habitat or for its conclusion that such designation results in no impact.

In all but a few fortunate years, there very simply is no reason to expect enough water to accomplish what the final rule contemplates--unless it is taken from other beneficial uses. In this event, both immediate and long-term alterations in water rights and usage will necessarily create economic losses and other adjustments which by any measure must be regarded as substantial. Some projections anticipate an annual diversion of 30,000 to 100,000 acre feet of water, trans-

lating into the loss of 15,000 to 50,000 acres of farmland. AR at IX.D.47. MRGCD projects that in an “average” year, water used to maintain a continuous flowing river will dry up over 23,000 acres of farmland, and in a “dry” year, there very well will not be enough water to maintain a continuous flow regardless of how drastically agricultural uses are curtailed. Id.

FWS has avoided every hard choice. If it rejects facts and premises such as those suggested by MRGCD, it has not explained why or on what basis. FWS merely denies countless facts and a multitude of opinion that do not fit its end, and by its Draft Economic Analysis openly maligns agricultural uses in the Middle Rio Grande Valley. It is no more than the smallest step further for FWS to declare 163 miles of the river’s mainstem as protected habitat and conclude nothing notable is likely to result. 64 Fed. Reg. 36280. FWS would have done better to acknowledge the meaning of a fully appropriated river system and deal with the existence of legally protected water rights.

A related case pending in this district, Rio Grande Silvery Minnow v. Martinez, CIV 99-1320, illustrates the extent of Defendants’ miscalculations to date. In Martinez environmental advocates sued the Bureau of Reclamation over management of Rio Grande water. In the Spring of 2000, plaintiffs pursued a preliminary injunction for the release of enough water into the river to save the silvery minnow from an imminent demise. The motion was resolved when parties to the case and others negotiated an Agreed Order intended to avert the complete disappearance of the silvery minnow while the numerous entities with interests in the Rio Grande litigated water usage and conservation measures. A formal supplement to the Agreed Order and the parties’ status reports following it detail maintenance of a constant flow in the Middle Rio Grande *from the October 1 to October 31, 2000*. According to the supplement, the City of Albuquerque

requested release of 45,000 acre feet of its San Juan-Chama water, with an anticipated “pay back” beginning January 1, 2005 at the rate of ten percent per year and continuing through 2014. The Bureau of Reclamation installed additional equipment to increase pumping capacity from the Low Flow Conveyance Channel to 40 cubic feet per second in the upper San Acacia reach (upstream of Bosque del Apache). MRGCD ceased its irrigation season early and on October 17, halted all diversions.

The status report filed by the Office of the United States Attorney on behalf of the federal defendants recites similar dramatic steps. The Bureau of Reclamation released 15,000 acre feet of municipal water in addition to the 45,000 acre feet provided by the City of Albuquerque, for a total of 64,900 acre feet of water. The Army Corps of Engineers in the same time period, and again solely to guarantee a continuous flow to October 31, released 12,000 acre feet of water from the Jemez Canyon Reservoir. MRGCD contributed 20,900 acre-feet of San Juan-Chama water on a lease basis.

It can easily be said that all of this comes to save the Rio Grande silvery minnow from jeopardy and is unfairly attributed to the designation of critical habitat in 1999. This is because of the dire nature of the minnow’s present situation and its recent and rapid disappearance from many parts of the river. But current efforts to preserve the minnow for the moment, as well as the next generation, should not be taken too quickly as proof of Defendants’ point. First, it is not clear how much Defendants’ have had a hand in allowing circumstances to become this extreme. Secondly, a designation of critical habitat in the last half of the eleventh hour provides a poor test. When all efforts take the form of desperate rescue questionably sustainable for more than a few months, a baseline, like impact, becomes beside the point.

The facts of the Martinez case contradict conclusions expressed in the final rule at issue at least to a point that raises a reasonable inference that Defendants ignored even the most probable of facts and circumstances and summarily denied what should have been obvious. The facts of the Martinez case are enough to demonstrate that the final rule is inherently unrealistic.

b. Failure to Specify “Primary Constituent Elements”

The final rule at issue also fails to identify the specific physical and biological features essential for the conservation of the silvery minnow. Instead, the rule states only an obvious need for “sufficient flowing water,” “water of sufficient quality” and “water of sufficient quantity.” Id. at 36279. These findings provide vague generalities that state little more than what is required for any fish species and are insufficient to clarify those constituent elements considered “primary” or most necessary to the silvery minnow. If acting on the basis of “the best scientific data available,” FWS should be able to articulate with a specificity capable of providing (1) a standard for distinguishing those geographical segments of the silvery minnow’s historic habitat truly critical to its survival, and (2) a cornerstone for informing federal agencies and others of those attributes of habitat considered immutable.

As it stands, the final rule’s determination of “primary constituent elements” is insufficient. The terms are too vague to provide a standard, much less an understanding of what the protected species requires or how the river should be managed and protected. The terms give little indication what FWS considers absolutely essential to the silvery minnow’s survival, how much water might be regarded as “sufficient,” where or when “sufficient” water is most critical or what touchstones FWS used in determining that all of the Rio Grande warrants a designation of “critical” habitat. To the contrary, the final rule speaks only in broad terms not useful in limiting

designation of critical habitat to the most essential areas and not helpful in understanding what the silvery minnow actually requires to return from the brink of extinction.

To a large extent, stating “primary constituent elements” in broad and general terms is what has enabled FWS to minimize the need to examine any specific portion of the silvery minnow’s habitat. The listed “primary constituent elements” are so characteristic of rivers, in general, it is not surprising all three elements can be found, or be potentially available, throughout the entirety of the Middle Rio Grande. While FWS has identified four reaches of the middle river “to reflect differences in biological, hydrological, geological, and human-use patterns,” nowhere has it considered designation of less than all four reaches as critical habitat.

EA at 13. I think this constitutes another fatal error.

From what the administrative record provides, each of the four described reaches are unquestionably distinct. The first, the Cochiti Reach begins at the downstream toe of Cochiti Dam and runs to the Angostura Diversion Dam in the community of Algodones. Id. This reach includes the Pueblos of Cochiti, Santo Domingo, and San Felipe.” Id. As the northernmost portion of the middle river, the Cochiti Reach is marked by clear, cool water free of sediment, algal growth, unstable and eroding riverbanks and unstable channel configurations. The Angostura Dam acts “to reduce water velocities and river slope upstream . . . resulting in a wider river channel with more fine materials in the riverbed. Downstream, the slope and water velocities increase . . . .” Id. at 13. “The Rio Grande silvery minnow is rare in the Cochiti Reach.” Id. at 14.

The Angostura Diversion Dam at the upstream end and Isleta Diversion Dam at the downstream limit bound the Angostura Reach which includes the Albuquerque metropolitan area, Bernalillo, Corrales, and the Pueblos of Sandia and Santa Ana. Id. at 14. The Rio Grande gains

sediment in the Angostura Reach, “becoming a predominately sand bed river with low, sandy banks . . . and numerous sand bars in the river’s channel.” Id. This portion of the river is notable for discharges from diversion channels which collect and transport storm runoff and municipal wastewater treatment plants, with at least one of the latter responsible for continuous and relatively substantial discharges into the river. Id. “Flow is currently perennial through this reach of the Rio Grande.” Id. Silvery minnow in this stretch increase with the downstream gradient; “the species is rare immediately downstream of the diversion dam and is uncommon at Bernalillo.” Id. The abundance of silvery minnow further south “appears to fluctuate both seasonally and annually, depending on flow conditions. Nowhere in this reach does this species achieve the comparatively high population levels observed in the reach between San Acacia Diversion Dam and Elephant Butte Reservoir.” Id.

The Isleta Reach, bounded by the Isleta Diversion Dam upstream and the San Acacia Diversion Dam downstream, includes the Isleta Pueblo and the communities of Belen and Los Lunas and is most notable for flood control levees. Id. at 15. Extensive portions of the reach are seasonally isolated and dry and dam leakage often provides the only available surface water. Id. Consequently, this part of the river supports few silvery minnow. Id. Irrigation return and localized flooding in tributaries can provide substantial flow in the lower 10 miles. Id.

The San Acacia Reach, which includes Socorro and the Bosque del Apache National Wildlife Refuge, is “the longest uninterrupted segment in the current range of the Rio Grande silvery minnow and supports the largest population. . . .” Id. at 15-16. This reach, the furthest downstream, is restricted both by a levee system and a conveyance channel which acts as a groundwater drain delivering irrigation return water and storm runoff to Elephant Butte



Reservoir. Id. “When present, late summer flow to this reach of the river is generally supplied by summer rainstorm events . . . “ Id. at 16. Irrigation water, traditionally not returned to the river, is moved directly into Elephant Butte Reservoir, with “marked effects on habitat availability . . . .” Id. at 17.

The dramatic and unavoidably negative economic consequences of designating the entirety of all four reaches critical habitat should have led FWS to a comprehensive examination of each reach individually. Even though FWS is completely reasonable in regarding these four reaches as profoundly interrelated, it has not specified what the silvery minnow needs at each stage of its development or the discrete characteristics of minnow habitat each reach (or part of a reach) can provide. “Adult silvery minnow are most commonly found in shallow and braided runs over sand substrate; young-of-year of the species occupy shallow, low velocity backwaters with sand-silt substrates. . . . Young-of-year and adult silvery minnow are seldom found in the same local habitat types.” AR at X.A.10, p. 7.

For all of these reasons, then, it is material that FWS did not at any time consider limiting its designation to some portions of the 163 miles as alternatives to designating the entirety. FWS looked exclusively at a “No Action Alternative” and designation of the entire middle river. E.A. at 30. Considering the overwhelming impact of designating the entire middle river and the failure to clarify the silvery minnow’s most essential needs, failure to examine every portion of the river or consider designation of less than all four reaches is not prudent. Neither does it comport with the ESA, which demands an assessment of those portions of the river which are most susceptible to special management measures and reasonable limits on the habitat designated “critical.”

Neither the process undertaken nor the result in the form of the final rule therefore satisfy

what the ESA expressly requires or what its legislative history suggests. The Secretary is required to define “primary constituent elements” in a meaningful way and by such definition to limit critical habitat, not to expand it to wherever a potential for commonly occurring constituent elements may take it. Thus, while separating out some reaches of the Rio Grande, or segments of some reaches, for critical habitat designation may be painstaking, both the law and the overwhelming consequences of not doing so require it.

Interior regulations direct the Secretary to focus “on the principal biological or physical constituent elements within the defined area . . . .” and to define constituent elements in terms of “spawning sites, feeding sites seasonal wetland or dryland” and other factors. 50 C.F.R. sec. 424.12(b). The recent designation of critical habitat for the spikedace and loach minnow in the Arizona-New Mexico Gila basin provides an illustration. In sharp contrast to the three non-specific “primary constituent elements” in question, the final rule designating critical habitat in the Gila River system lists thirteen primary constituent elements for the loach minnow and an additional twelve distinct elements for the spikedace. For the latter, the primary constituent elements are defined as:

1. Permanent, flowing, unpolluted water:
2. Living areas for adult spikedace with slow to swift flow velocities in shallow water with shear zones where rapid flow borders slower flow, areas of sheet flow at the upper ends of mid-channel sand/gravel bars, and eddies at downstream riffle edges;
3. Living areas for juvenile spikedace with slow to moderate flow velocities in shallow water with moderate amounts of instream cover;
4. Living areas of larval spikedace with slow to moderate

flow velocities in shallow water with abundant instream cover;

5. Sand, gravel, and cobble substrates with low to moderate amounts of fine sediment and substrate embeddedness;
6. Pool, riffle, run, and backwater components present in the aquatic habitat;
7. Low stream gradient;
8. Water temperatures in the approximate range of 1-30 degrees C (35-85 degrees F), with natural diurnal and seasonal variation;
9. Abundant aquatic insect food base;
10. Periodic natural flooding;
11. A natural, unregulated hydrograph or, if the flows are modified or regulated, than a hydrograph that demonstrates an ability to support a native fish community; and
12. Habitat devoid of nonnative aquatic species detrimental to spikedeace, or habitat in which detrimental nonnative species are at levels which allow persistence of spikedeace. 65 Fed. Reg. 24334 (April 15, 2000).

The final rule for the spikedeace and loach minnow examines precise reaches of the Gila, Tularosa and San Francisco rivers, as well as numerous creeks and tributaries, analyzing each for the constituent elements and explaining why some areas are included as critical habitat and others are not. Id. at 24327-24372. Unlike the rule for the silvery minnow, the designation of critical habitat for the spikedeace and loach minnow does not include areas because they are “capable of containing” primary constituent elements. Id. The final rule for the spikedeace and loach minnow also specifies what is needed for adult, juvenile and larval of the species, while the rule at issue makes no such distinctions.

In failing to be more specific in the present case, Defendants neglect more than articulation. It appears nothing in the final rule or the administrative record adequately explains exclusion of floodplain in the middle valley as critical habitat. Thus, on the one hand, FWS generously includes as “critical” portions of the middle river merely “capable” of containing constituent elements, but on the other hand, excludes floodplain areas with little explanation or justification in the record.

The silvery minnow, like the loach minnow, are said to require periodic flooding for the reproduction process. Understandably, then, the rule designating critical habitat for the loach minnow expressly designates floodplain as critical habitat. The rule acknowledges that

the naturally dynamic nature of riverine systems recognizes that floodplains are an integral part of the stream ecosystem. A relatively intact floodplain, along with periodic flooding in a relatively natural pattern, are important elements necessary for long-term survival and recovery of spinedace and loach minnow. Among other things, the floodplain and its riparian vegetation provide space for natural flooding patterns and latitude for necessary natural channel adjustments to maintain appropriate channel morphology and geometry, provide nutrient input and buffering from sediment and pollutants, store water for slow release to maintain base flows, and provide protected side channels and other protected areas for larval and juvenile spinedace and loach minnow. 65 Fed. Reg. 24331.

If the silvery minnow represents a drastically different situation, nothing in the final rule or the administrative record explains the difference or justifies the designation of floodplain in one instance and not the other.

Neither does the final rule or the administrative record in this case establish that, as a “primary constituent element,” a continuous flow of “sufficient” water in the Middle Rio Grande is enough to save the silvery minnow from extinction. It appears the silvery minnow is *not*

dependent on a continuous 163-mile flow, and provision of a constant flow throughout the middle river *without more* will not preserve the species at present levels, much less return it from the edge of extinction. Referring again to what FWS has published as a final rule for the loach minnow, Defendants appear to recognize in that instance what they have assumed without sufficient inquiry or critical analysis in the present one.

Spikedace and loach minnow, along with most of the native fishes of the southwest, evolved in stream systems that had portions which periodically lost flow. The species are adapted to this phenomenon and persist in flowing areas that remain and recolonize the dewatered areas once flow resumes.

. . . .

If sufficient areas of flow persist, and if all other habitat needs are met, then the stream is suitable for the two fish species whether or not there is flow throughout all areas at all times. Aravaipa Creek, one of the best remaining habitats for these two species, is an “intermittent” stream, which seldom flows in the upper half of its course, and often does not flow for several miles above its confluence with the San Pedro River. . . . However, approximately 20-25 mi of stream presently flow at all times and support healthy populations of spikedace and loach minnow. . . . The critical habitat designation also specifically includes many areas that lose flow periodically, and some which may be dry during most times. . . . During high flows they serve as connecting corridors for movement between the areas of permanent flow and because they are important in maintenance of natural channel morphology. Id. at 24345-24346.

If the Rio Grande silvery minnow represents a drastically different situation, nothing in the final rule or the administrative record explains what makes the silvery minnow different from “most of the native fishes of the southwest.” It appears nothing in the record explains--if the silvery minnow does not adapt to dry areas and persist in flowing areas to recolonize dewatered areas once flow resumes--how it has survived in a river that in the last century has seldom

provided a continuous, year-round, bank-to-bank flow or how it comes now to depend absolutely on maintenance of a continuous flow throughout the entirety of the middle river.

What the challenged final rule does not settle therefore becomes a most crucial question. Before demanding the enormous cost and sacrifices which inevitably would accompany maintenance of a continuous flow throughout the Middle Rio Grande in very dry or even less than optimum years, before such a demand can be deemed reasonable by any means, Defendants must establish that a continuous flow is necessary to the minnow's survival and is clearly capable of saving the silvery minnow from extinction. This they have not done. From the administrative record and the text of the final rule, it appears that Defendants have chosen to operate from assumptions and generalizations and avoid issues of river management and specific habitat protections. Defendants thus propose a continuous flow in the middle Rio Grande as the first and last need. By this proposition "sufficient" water, however the term is defined, very literally becomes not simply a "primary" element, but the sole element.

At the same time, maintenance of a year-round, bank-to-bank flow in 163 miles of the Rio Grande, if not for the short-term, at least in the longer term, can be rationally regarded as wholly antithetical to the nature of the river and its region. Certainly, it depends on optimum conditions, including maximum amounts of annual rainfall and more--which historically occurs only sporadically in times of great good fortune. Certainly, it dictates a level of understanding, management and surveillance that is exceedingly difficult. Equally certain, it may come down to a quantity of water that will not exist.

The designation of critical habitat is so broad and the directive to maintain poorly defined uninterrupted flows so impractical as to render compliance impossible. Both Plaintiffs and amici

see the designation of critical habitat as inhibiting all future federal projects, “from municipal, to industrial, to agricultural,” intended to support water users in the Middle Rio Grande Valley. One amicus suggests that “any action--even one as simple as opening an irrigation floodgate--may be prohibited because it will be perceived as destroying or adversely modifying critical habitat.”

However it is to be interpreted, the final rule falls far short of its purpose. It does not provide adequately specific “primary constituent elements” as standards for distinguishing habitat truly critical to the silvery minnow’s survival and it does not limit the designation of critical habitat according to obligatory tests. It fails to notice federal agencies and others of what is most essential to the minnow or its habitat or advise those who might act to the detriment of the habitat what changes are most certainly harmful. As a whole, it is not a reasonably specific response to statutory and regulatory requirements that direct the designation of critical habitat.

#### c. Failure to Consider Federally-Related Activity

The final rule emphasizes the scope of ESA protections as limited to actions funded, authorized or carried out by federal agencies. 64 Fed. Reg. 36278. However, in referring to Section 7 “interagency cooperation,” FWS haphazardly identifies the agencies whose actions are subject to ESA Section 7 provisions and too readily dismisses all non-federal entities, without regard for their dependence on or interrelationship with federal action. According to the final rule:

The designation of critical habitat directly affects only Federal agencies, by prohibiting actions they fund, authorize, or carry out from destroying or adversely modifying critical habitat. Individuals, firms and other non-Federal entities are not affected by the designation of critical habitat so long as their actions do not require support by permit, license, funding, or other means from a Federal agency. *Id.* at 36278.

Much of what occurs in the Middle Rio Grande Valley, however, is federally-related.

FWS's meager consideration of "non-federal" activity ignores an exceptional interrelationship between federal and non-federal in the Middle Rio Grande Valley as documented by the administrative record. FWS's Economic Analysis speaks at length about the extent of federal subsidies in the area and finds the Rio Grande Valley critically dependent on federal support. Yet, FWS skirts the full scope of future federally-related activity likely to come within ESA protections. At the same time, even though the Bureau of Reclamation contends that maintaining a constant flow in the Rio Grande could have serious impact on the delivery of water to Texas and Mexico, both the Economic Analysis and FWS discussions ignore completely consideration of water to be delivered out of state pursuant to binding federal compacts. In general, then, both the administrative record and the final rule include too little consideration of effects of the critical habitat designation on the Middle Rio Grande Conservancy District, the Interstate Stream Commission, the Albuquerque Metropolitan Arroyo Flood Control Authority (AMAFCA), as well as the six Indian Pueblos, all likely to be at the heart of new restrictions.

Similarly, FWS appears to have given little weight to the multiple concerns expressed by agencies of the State of New Mexico. In addition to the MRGCD, the ISC and the Pueblos, non-federal landowners and managers within or bordering the designated area likely to be involved in federally-related land and water management issues and activities in the Middle Rio Grande Valley include the New Mexico State Parks Division, the New Mexico Department of Game and Fish, the New Mexico State Lands Department and the numerous communities and political subdivisions located in the region. Although information collected by FWS (as in its 1996 Economic Analysis) was incomplete, and in 1999 the Economic Analysis clearly needed updating, FWS neither looked to these entities for the valuable information they might have contributed nor



considered these entities when deciding that unspecified “non-federal” activities would not be included in ESA Section 7 procedures.

While FWS finds that ownership of the active channel of the mainstem of the Rio Grande “is unclear,” it concludes “most of the land in the middle river valley that abuts critical habitat is within the administrative boundaries of the Middle Rio Grande Conservancy District,” and then determines the MRGCD to be a subdivision of the State of New Mexico. 64 Fed. Reg. 36279. FWS makes no mention of the inextricable tie between MRGCD and the United States. See: Exhibit C to Plaintiffs’ Joint Reply re: the issue of standing. According to the Bureau of Reclamation, at least, also an agency of the United States Department of the Interior, MRGCD is “an agent of the United States operating Federal facilities” and “required to operate all transferred works in compliance with Federal law including the ESA.” *Id.* Nevertheless, FWS undertakes no thorough examination of what designating the entire middle Rio Grande as critical habitat would mean to the MRGCD and dismisses it, with untold other activity, as “non-federal.” This constitutes an arbitrary failure to consider pertinent facts.

As another example, AMAFCA is the flood control authority for the greater Albuquerque metropolitan area. Section 72-16-5-20 NMSA 1978. Flood and storm waters within AMAFCA’s jurisdiction discharge into the Middle Rio Grande and the designated critical habitat. AR at IX.D, at 59. By the maintenance and construction of diversion channels, AMAFCA is expected to provide flood protection to the City of Albuquerque by intercepting flood and storm waters which drain from the mesa and western mountain slopes into the Rio Grande. AMAFCA also maintains levees and detention dams along the Rio Grande and its tributaries. AR at IX.E. at 12. Many of its activities are necessarily undertaken in conjunction with the Army Corps of Engineers. Others

actions are subject to joint-use agreements with the Bureau of Reclamation. Some are separately subject to a federal permit process. Still, FWS has failed to discuss its expectations in regard to AMAFCA.

Regardless of its position that no impact is attributable to the designation, FWS should have explicitly addressed the concerns of AMAFCA and other State and local entities likely to see change as a result of ESA protections. By merely reiterating its “no impact” conclusion without any explicit references to common issues, FWS undermines its own credibility and does nothing to advise the public or waylay its concerns. AMAFCA states, for example, that because of the ESA’s Section 7 consultation requirements and the need for additional federal permits, it fears it may be required (or the Army Corps of Engineers may be required) to curtail or eliminate flood control operations, to forgo or modify maintenance activities, to alter operations at great cost to taxpayers who fund the agency and to delay needed activity. If AMAFCA stands in error in anticipating these results, FWS should have explained why that is so. If AMAFCA accurately estimates changes likely to occur, FWS should have discussed that, as well.

FWS similarly cut short assessment of impacts on Indian lands by declaring, first, that *if* restrictions resulting from the designation of critical habitat were “directed at a Tribal activity,” an issue of “direct (directed) take under the Act” may arise, but in such an instance, “meaningful government-to-government consultation shall occur. . . ;” and secondly, that “critical habitat designation will impose no additional restrictions on activities on Indian lands beyond the prohibitions already in place against jeopardy and unpermitted taking of the species.” 64 Fed. Reg. 36280-36281. Again, this and no more provides nothing to address legitimate concerns and nothing to indicate FWS gave fair consideration to either Indian interests or activity extremely

likely to come with ESA and Section 7 proscriptions. Reassurances for the future carry very little value. Again, if for no other reason than to waylay public fears and unreasonable expectations, FWS should have done more in explicitly addressing Indian issues.

FWS also neglected the concerns of federal agencies. As one means employed by FWS to investigate economic and impact, it sent questionnaires to federal agencies asking each to assess “the extent to which they would alter their activities in response to critical habitat designation.” Id. at 35280. Most agencies are said by FWS to have reported “no effect.” Id. Actually, the administrative record reflects multiple issues worthy of grave concern presented both by the Bureau of Reclamation and the Army Corps of Engineers. FWS dismissed all of this out of hand; but in summarily rejecting these issues as not worthy of consideration, FWS fails to acknowledge the central role of the Bureau of Reclamation and the Army Corp of Engineers in control and management of the Rio Grande. 64 Fed.Reg. 36280. If FWS prefers its own conclusions over those of federal agencies with expertise more specific than its own, FWS must expressly provide the reasons for its judgments. Again, FWS addresses these matters by reiterating its general conclusion that any change is to be assigned to the initial listing of the silvery minnow as endangered and the designation would result in “no impact.” Again, this is not enough.

#### Necessity of NEPA Compliance

Ordinarily, a designation of critical habitat pursuant to the ESA which occurs in the Tenth Circuit requires full compliance with NEPA. Catron County Board of Commissioners v. United States Fish and Wildlife Service, supra at 1435. Disagreeing with other circuits on the issue, the Tenth Circuit Court of Appeals does not consider ESA procedures to duplicate or to displace NEPA requirements. Id. at 1435-1436. Nor does this circuit consider the two statutes mutually

exclusive. Id. at 1435. Further, the Tenth Circuit does not permit an assumption “that no actual impact flows from the critical habitat designation” so as to eliminate the need for NEPA compliance. Id. at 1436.

NEPA requirements in this circuit are therefore mandatory unless obligations of another statute are clearly mutually exclusive. Davis v. Morton, supra at 598. NEPA was not intended to override or subvert other statutes. Vermont Yankees Nuclear Power Corp. v. Natural Resources Defense Council, Inc., 435 U.S. 519, 548 (1978); United States v. SCRAP, 412 U.S. 669, 692-94 (1973). Neither was NEPA intended to repeal other statutes by implication. Id. at 694; Catron County Board of Commissioners v. United States Fish and Wildlife Service, supra at 1435. “Compliance with NEPA is excused when there is a statutory conflict with the agency’s authorizing legislation that prohibits or renders compliance impossible.” Id. at 1434.

However, Tenth Circuit case law restricts “mutually exclusive” to conflicts which are “unavoidable” and “irreconcilable” and defines a “conflict” excusing NEPA compliance solely in terms of impossibility. Id. Therefore the Tenth Circuit, in general, does not view NEPA and the ESA as mutually exclusive; it suggests, instead, that NEPA compliance can further ESA goals. Id. While the Tenth Circuit acknowledges that “provisions of the ESA governing the designation of critical habitat instruct the Secretary to follow procedures that to some extent parallel and perhaps overlap the requirements imposed by NEPA,” it sees an ESA critical habitat designation as having a specific focus which only partially fulfills NEPA’s primary purposes. Id. at 1436.

The Tenth Circuit has not yet been confronted with a case where NEPA goals and ESA goals were held incompatible; and even though exceptions may exist to NEPA compliance in an ESA case, Flint Ridge Development Co. v. Scenic Rivers Ass’n, 426 U.S. 776, 778 (1976);

United States v. SCRAP, supra, circumstances in the Tenth Circuit which would relieve the Secretary of the Interior from the duty to prepare an EIS when designating critical habitat will be unquestionably rare. Catron County Board of Commissioners v. United States Fish and Wildlife Service, supra. The present case does not at this point present that rare exception. Especially considering it is now winter and the season should provide some relief from the exigencies that have taken a serious toll on the Rio Grande silvery minnow in recent months, it is possible both to acknowledge the very prominent threat to the minnow's survival and to expect FWS neverthe-less to prepare an Environmental Impact Statement before implementation of a new final rule designating critical habitat.

#### Constitutional Claims

Because I find and conclude that the final rule in question is invalid on statutory grounds, I see no reason to reach Plaintiffs' contentions with regard to constitutional and Fifth Amendment claims.

#### Conclusion and Remand

Based on the record and the final rule, then, I find the Defendants relied on incomplete and untimely information, failed to follow a course of inquiry calculated to provide vital facts, failed to account for plain facts which obviously countered the agency's conclusions, and substituted preconceived general conclusions for an individualized analysis and reasoning process. I conclude, therefore, that Defendants have failed to consider important aspects of the problem before them, were predisposed to their conclusions without a thorough examination of the facts or situation presented, in the designation of critical habitat for the silvery minnow have neglected to follow NEPA and ESA requirements, and have put forward a grossly inadequate explanation of their

decision to designate the whole of the Middle Rio Grande as critical habitat for the silvery minnow. The latter has only minimal factual and rational support in the record and which fails to accord with what the Endangered Species Act intends or requires. The final rule must therefore be set aside.

Setting aside the rule, however, is not enough. The urgency of the situation and the complexity of the many interests to be reconciled require Defendants to do more than prepare an Environmental Impact Statement and issue a new final rule. Both the future of the Rio Grande silver minnow and the Middle Rio Grande Valley stand at imminent risk. For the sake of the former, I will not set aside the final rule for 120 days. For the sake of the latter, I will expect the United States Fish and Wildlife to work earnestly with the parties and other interested persons and entities in negotiations now occurring in Rio Grande Silvery Minnow v. Martinez, *supra*. The several “bona fide differences,” as the Supreme Court referred to the issues in Texas v. New Mexico, *supra* at 576, that work against long-term solutions in this case are worthy of more exploration than publication of an EIS or promulgation of a new final rule or 120 days can provide.

I am gravely concerned for the just and prudent weighing of difficult facts and the fair and complete consideration of competing interests, many of which are alien to legal or judicial solution. As the United States Supreme Court noted in Texas v. New Mexico, some disputes are “more likely to be wisely solved by co-operative study and by conference and mutual concession” than “by proceeding in any court however constituted.” *Id.* at 575. An opportunity is presented by mediation sessions being conducted in this district by Magistrate Robert DeGiacomo. He has brought the multiple interests concerned with the waters of the Rio Grande and the survival of the

silvery minnow to the table to mediate a successful Agreed Order in the Martinez case; and by continued negotiations these same interests may pursue agreements of a more permanent nature. The matters to be undertaken are immediately relevant to the three consolidated cases here decided, and at a minimum, the sessions conducted by Judge DeGiacomo provide a means for the Fish and Wildlife Service to air its findings as it prepares an EIS and a new rule and to accept the several facts and opinions offered by those who have a close and pertinent understanding of the dilemmas presented.

NOW, THEREFORE, IT IS ORDERED that the final rule designating critical habitat for the Rio Grande silvery minnow is declared invalid for failure of Defendants to comply with the National Environmental Policy Act and the Endangered Species Act.

IT IS FURTHER ORDERED that the final rule designating critical habitat for the Rio Grande silvery minnow is to be set aside as arbitrary and capricious, but that due to the dire circumstances presently threatening the Rio Grande silvery minnow, the rule is to remain in operation for 120 days from the date of this Order or until the Secretary of the Interior issues an emergency rule in its place, whichever is earlier. In this respect Plaintiffs' request for a permanent injunction is denied in part; Plaintiffs' request for a permanent injunction is granted beginning 120 days from the date of this Order, after which Defendants are permanently enjoined from enforcing the rule here set aside.

IT IS FURTHER ORDERED that Defendants issue an Environmental Impact Statement and propose a new rule within 120 days of the date of this Order, and afterward proceed forthwith to publish a final rule.

IT IS FURTHER ORDERED that Defendants' representatives, including especially the United States Fish and Wildlife Service, fully and earnestly participate in mediation now being conducted in the case of Rio Grande Silvery Minnow v. Martinez, District of New Mexico Case No. CIV 99-1320. For purposes of the mediation sessions, these cases are consolidated, and Defendants are to follow the directions of the presiding judge as ordered.



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SENIOR UNITED STATES JUDGE